

**CDAT Course [Dec 2004]:  
Welcome**

# Welcome

- Introductions
- Aims
- House-keeping
- Timetable
- Materials
- Making time for exploration
- Evaluation sheet



## Who are we?

- Ag Stephens (BADC – CDAT *user/developer*)
- Charles Doutriaux (PCDMI (LLNL) – *real CDAT developer*)
- Thanks to NIEeS:
  - Martin Dove (Director)
  - Stuart Ballard (Science Coordinator)
  - Martin Keegan (Technical Coordinator)
  - Helen Wells (Course Administrator)

# Aims of the course

The course aims to:

- provide a beginner's guide to CDAT
- capture the most useful bits
- allow time for your issues
- provide hands-on experience as well as taught material
- provide a set of notes and references that will allow participants to boldly go out into the world as proud CDAT users



## What it is not

The course is not:

- a comprehensive description of CDAT and all its sub-packages (*not enough time*)
- intended for advanced CDAT users or developers
- a guide to using VCDAT (but we will mention it)
- *supposed to be dull!* Help keep us awake by asking lots of questions and making life difficult for us.

## House-keeping

- Timing
- Toilets
- Health & Safety
- Fire Exits
- Breaks
- Lunch
- Evening meal
- Accommodation
- Issues to explore later



# Timetable: Day 1

<i>Morning Session</i>		<b>Python and CDAT Basics</b>
10:00	10:15	Introduction
10:15	10:45	What is CDAT? Brief Tour
10:45	11:05	Getting started - Installation and environment variables
11:05	11:35	Introduction to python 1
11:35	11:55	<i>Coffee/Tea</i>
11:55	12:30	Introduction to python 2
12:30	13:00	Python exercises
13:00	13:45	<i>Lunch</i>
<i>Afternoon Session</i>		<b>Manipulating Data</b>
13:45	14:15	Data ingestion and output
14:15	15:00	Arrays, variables, axes and missing values
15:00	15:45	Data manipulation exercises
15:45	16:05	<i>Coffee/Tea</i>
16:05	16:50	Averaging and grids
16:50	17:30	A walk through VCDAT
17:30	18:00	Rounding up Day 1

# Timetable: Day 2

<i>Morning Session 1</i>		<b>Additional CDAT Packages</b>
09:00	09:35	cdscan and cdtime
09:35	10:15	cdscan and cdtime exercises
10:15	10:45	<i>Coffee/Tea</i>
<i>Morning Session 2</i>		<b>Plotting with VCS</b>
10:45	11:30	VCS basics
11:30	12:15	VCS tutorials
12:15	12:45	VCS in-depth
12:45	13:30	<i>Lunch</i>
<i>Afternoon Session 1</i>		<b>Additional CDAT Packages</b>
13:30	14:00	cdutil and genutil
14:00	14:30	cdutil and genutil exercises
14:30	14:50	<i>Coffee/Tea</i>
<i>Afternoon Session 2</i>		<b>Advanced features and building on CDAT</b>
14:50	15:10	Binding to other languages (Fortran and C)
15:10	15:40	Building on CDAT
15:40	16:10	Exercising your CDAT knowledge
16:10	16:30	Rounding up Day 2



# Materials

- Presentations
- Links and Support
- Exercises & Solutions
- Quick start sheets

## Time for your issues

- Flipchart to record issues that arise along the way.
- Scheduled 30 minutes per day to deal with those.
- *But those of you that want to do exercises instead during that time can do.*